

Appendix J

Key Elements of an Acceptable Section 111(d) State Plan

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States must submit to the Environmental Protection Agency (EPA) State Plans to implement and enforce the Emission Guidelines promulgated for Municipal Solid Waste (MSW) landfills pursuant to Section 111(d) of the Act. Section 111(d) requires that the state submit the State Plan not later than 9 months after EPA promulgates the Emission Guidelines. EPA promulgated the Emission Guidelines (40 CFR Part 60, Subpart Cc) on March 12, 1996, thus, the State Plans are due no later than December 12, 1996.

States must adopt their State Plans according to state procedures prior to official submittal to EPA. [60.23 (a)] The official procedures for adopting and submitting State Plans are codified in 40 CFR Part 60, Subpart B. EPA promulgated the original provisions on November 17, 1975, and then amended them on December 19, 1995, to incorporate changes specific to solid waste incineration. These changes, which were necessary to conform with the solid waste incineration requirements under Section 129 of the Act, are not relevant to MSW landfills. Thus, the procedures described in the original provisions for adopting and submitting State Plans still apply to MSW landfills and are reflected in the key elements given below.

The following pages include information about legal authority, emission inventories, emission standards and other emission limitations, process for review of design plans, compliance schedules, public participation, source surveillance, compliance assurance, enforcement, as required by 40 CFR Part 60, Subparts B and Cc. In addition, cross-references to relevant sections of the subparts are provided.

A. Legal Authority [60.26(a)]

1. The State Plan shall include demonstration of the state's legal authority to:
 - (a) adopt emission standards (enforceable conditions) and compliance schedules applicable to the designated facilities and designated pollutants for which the State Plan is submitted
 - (b) enforce applicable laws, regulations, standards, and compliance schedules, and seek injunctive relief
 - (c) obtain information necessary to determine compliance
 - (d) require recordkeeping, make inspections, and conduct tests
 - (e) require the use of monitors and require emission reports of owners or operators
 - (f) make emission data publicly available [60.26(a)]

2. The state must specifically identify the provisions above and include copies of the provisions of the law establishing such legal authority unless they have been approved as a portion of a previous Section 111(d) State Plan or SIP. To facilitate its review of State Plans, EPA encourages states to submit an opinion by the state's Attorney General as part of the demonstration required above. States may use previously submitted Attorney General opinions (for example, under Title V) to the extent those documents specifically address the requirements of Section 60.26 as they apply to the designated facilities and the designated pollutants. [60.26(b)]
3. The legal authority shown must be in effect at time of State Plan submission. [60.26(c)]
4. The state may authorize another state governmental agency to carry out a portion of the State Plan, provided the state demonstrates that the state governmental agency has adequate authority. [60.26(e)]
5. The state may authorize a local agency to carry out a portion of the State Plan provided that the state demonstrates that the local agency has adequate legal authority to implement that portion of the State Plan and the state is not relieved of responsibility. [60.26(e)]

If earlier demonstrations of legal authority by the state meet the requirements of § 60.26, the state will simply need to include copies of such demonstrations in the State Plan.

B. Source and Emission Inventories

The State Plan must include a complete source inventory of existing MSW landfills in the state that are regulated by the Emission Guidelines. [60.25(a)] The inventory must include the name and location of all existing landfills, whether open or closed, that have accepted waste since November 8, 1987 or have additional capacity for future waste acceptance. Landfills with design capacities both above and below the 2.5 million Mg/yr or 2.5 million M³/yr design capacity cutoffs must be included. New landfills (i.e., those that commenced construction, modification, or reconstruction on or after May 30, 1991) do not have to be included in the inventory.

For each landfill in the source inventory, the State Plan must include emission data for the designated pollutants (MSW landfill emissions, measured as NMOC). [60.25(a)] Emission data must be included where available, but emission estimates can be used if emission data is not available. States can use emission estimation procedures from AP-42, "Compilation of Air Pollutant Emission Factors" to estimate landfill NMOC emission rates for the state inventory. (AP-42 procedures should not be used to determine applicability of, or compliance with, the Emission Guidelines.)

In addition to the initial inventory, updates are required. [60.25(f)(5)] The updated information is required to be submitted annually in the 51.321 reports. [60.24(e)(1)] The emission data should be submitted to the Aerometric Information Retrieval System (AIRS) [51.321-51.323]

C. Emission Standards

1. The emission standards shall be no less stringent than the Emission Guidelines. [60.24(c)]
However, under certain limited conditions and on a case-by-case basis, states may apply less stringent emission standards or longer compliance schedules. This reduced stringency is allowed if the state demonstrates with respect to the designated facility or class of facilities that:
 - a. the cost of control would be unreasonable because of plant age, location, or basic process design;
 - b. it would be physically impossible to install necessary control equipment; or
 - c. there are other factors specific to the facility or class of facilities that make application of a less stringent standard or final compliance time significantly more reasonable. [60.24(f)]

NOTE: Nothing in the Clean Air Act nor the CFR restricts the state from having standards and schedules more stringent than the Emission Guidelines. [60.24(g)]

2. The State Plan shall include the specific emission limitations, preferably cross-referenced to the specific Emission Guideline requirements. [60.24(a)]
3. Test methods and procedures for determining compliance shall be specified. [60.24(b)2]
4. If the methods and procedures are not identical to those in Sections 60.34c, 60.755, and 60.756, the state must demonstrate equivalence or request EPA approval of acceptable alternatives per current EPA method review procedures. [60.24(b)(2)]
5. If emission standards are adopted by local agencies or other state agencies, they must also be included in the State Plan and if not identical to the Emission Guidelines, then the state must show that they are at least as protective as the emission guidelines except as specified in "1," above. [60.24(a)]

D. Process for Review of Design Plans

Subpart Cc requires site-specific design plans for the required gas collection and control systems. The State Plan must also include a process for state review and approval of design

plans. These landfill State Plan requirements are unique to landfills because they are required by Subpart Cc, rather than Subpart B.

The design plan must be prepared by a professional engineer, must meet the design criteria in Section 60.752(b)(2)(ii) of Subpart WWW, and must be submitted to the state for approval. For further information about the design criteria and for examples of alternative designs, refer to "Municipal Solid Waste Landfills, Volume 1: Summary of the Requirements for the New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills" (EPA-453/R-96-004).

1. For approval, a State Plan shall include the installation of a collection and control system meeting the conditions provided in Section 60.752(b)(2)(ii) of Subpart Cc at each MSW landfill meeting the conditions of Section 60.33c(a). [60.33c(b)]
2. The State Plan shall include a process for state review and approval of the site-specific design plans for the gas collection and control system(s). [60.33c(b)]
The description of the process in the State Plan could include information on review responsibilities, schedules, and notification procedures such as communication of reasons for disapproval.

E. Compliance Schedules

1. Compliance schedules must match the Cc and B specifications except as specified above in "1" under Emission Standards. [Subpart Cc, 60.36c]
2. For compliance schedules for MSW landfills extending more than 12 months beyond the date required for submittal of the plan (December 12, 1996), the compliance schedule must include legally enforceable increments of progress towards compliance for that MSW landfill. Each increment of progress in Section 60.21(h) of Subpart B must have a compliance date and must be included as an enforceable date in the State Plan. The State Plan may include such additional increments of progress as may be necessary to permit close and effective supervision of progress towards final compliance. [60.24(e)(1), & 60.21(h)]

The minimum increments of progress are as follows:

- (a) Submittal of Final Control Plan (Design Plan); [60.21(h)(1)] For landfills, the design must include the information specified in § 60.752(b)(2) of Subpart WWW.
- (b) Awarding of contracts for controls systems or process modifications or orders for purchase of components; [60.21(h)(2)]

- (c) Initiation of on-site construction or installation of the air pollution control device(s) or process changes; [60.21(h)(3)]
- (d) Completion of on-site construction or installation of control equipment or process changes; [60.21(h)(4)]
- (e) Final compliance. [60.21(h)(5)]

These increments of progress can be set as calendar dates or floating dates tied to the effective date of EPA's approval of the State plan for MSW landfills or the date of the first Annual Emission Rate Report that shows that NMOC emissions equal to or exceeding 50 Mg/yr. For example, the date for submitting a final control plan (design plan) could be set as 1 year after the date of the first Annual Emission Rate Report showing that the NMOC emission rate is 50 Mg/yr or greater. This timing is consistent with Subparts Cc and WWW.

- 3. The State Plan may include one set of increments with compliance dates applicable to all MSW landfills, or the State Plan may vary the compliance dates to address specific issues relevant to individual landfills. However, the enforceable increments of progress must be arranged chronologically and the compliance dates must be set to ensure full compliance with the applicable requirements *as expeditiously as practicable*. [60.24(c)] For example, a State Plan that requires an MSW landfill to "submit a final control plan (design plan) no later than 24 months after the effective date of a State emission standard" will be closely examined to determine whether the state is requiring the MSW landfill to comply as expeditiously as practicable.

F. Public Participation

Public participation, under the Clean Air Act, is an important right and responsibility of citizens in the state process of developing, adopting, and implementing the required Section 111(d) State Plans. Under 40 CFR Part 60, Subpart B, the minimum requirements for the state to conduct public hearings on the adoption of State Plans and any revisions thereof are as follows:

- 1. Reasonable notice of one or more public hearing(s) at least 30 days prior to the hearing(s). [60.23(d)]
- 2. One or more public hearing(s) on the State Plan (or revisions) conducted in location(s) within the state. [60.23(c)(1)]
- 3. Date, time and place of hearing(s) prominently advertised in each region affected. [60.23(d)(1)] "Region" is defined as "air quality control region". [60.21(i)]
- 4. Availability of draft State Plan for public inspection in at least one location in each region to which it will apply. [60.23(d)(2)]

5. Notice of hearing provided to: (a) EPA Regional Administrator, (b) local affected agencies, and (c) other states affected. *[60.23(d)(3),(4),&(5)]*
6. Retention of hearing records (for example, list of commenters and their affiliation and summary of each presentation and comments submitted and the state's responses to those comments) for at least 2 years. *[60.23(e) and (f)]*
7. Certification that public participation was conducted in accordance with Subpart B and state procedures. *[60.23(f)]* Upon written application by the state agency, EPA may (expected only for limited special cases) approve different procedures provided that they ensure adequate public participation. *[60.23(g)]*

No hearing is required on a state or local emission standard in effect prior to March 12, 1996, the effective date of Subpart Cc, if it was adopted after a public hearing and is at least as stringent as the Emission Guidelines. *[60.23(c)(3)]*

Similarly, no public hearing is required for any change to an increment of progress unless the change is likely to cause the facility to be unable to comply with the final compliance date. *[60.23(c)(2)]*

G. Source Surveillance, Compliance Assurance & Enforcement

The State Plan must provide for monitoring the status of compliance. As a minimum, the State Plan shall include:

1. Provisions for legally enforceable procedures to:
 - (a) require recordkeeping on nature and amount of emissions and reports to the state. *[60.25(b)(1)]*
 - (b) require any additional information to judge compliance. *[60.25(b)(1)]*
2. Provisions for periodic inspection and testing, if necessary. *[60.25(b)(2)]*
3. Provisions for emission data and other compliance monitoring information to be correlated with applicable emission standards and be made available to the public. "Correlated" means showing the relationship between the measured or estimated amounts of emissions and the amounts of such emissions allowable. For example, the emissions should be in the same units and averaging times. This would include the annual emission rate reports, in Mg/yr, that must be submitted by uncontrolled landfills. The reported annual emission rate would be compared to

the 50 Mg/yr threshold to determine whether controls must be installed.¹
[60.25(a) and (c)]

4. MSW landfill requirements for Testing, Monitoring, Recordkeeping, and Reporting that are identical to those specified in 60.34c, 60.35c *[Subpart Cc]*, and 60.755, 60.756, 60.757, 60.758. *[Subpart WWW, referred to by Subpart Cc]*
5. Specific identification of the provisions in 1 through 4 above. Copies of such provisions should be included unless they have been approved as portions of a preceding Section 111(d) State Plan or State Implementation Plan (SIP) and the state demonstrates that the provisions are applicable and the requirements of 60.26 (legal authorities) are met. *[60.25(d)]*
6. Commitment to submit reports on progress in plan enforcement to the EPA Regional Administrator on an annual basis and include it in the reports required by 51.321. *[60.25(e) and (f)]* Each progress report shall include: enforcement actions, achievement of increments of progress, identification of sources that have ceased operation, emission inventory information for sources that were not in operation at the time of plan development, updated emission inventory and compliance information, and copies of technical reports on all performance testing, including concurrent process data. *[60.25(f)(1) through 60.25(f)(6)]*

Note: Some states and regions have developed more specific or tailored reporting and recordkeeping procedures via Memoranda of Agreements, Program Specific Guidance for Section 105 Grants, and the Timely and Appropriateness Guidance that should also be followed. For example, some regions prefer that the state retain the performance test report until the region needs to review it as part of a compliance determination or other action.

¹For landfills that require control, the emission standards are expressed in terms of design criteria and operational requirements for the gas collection system and a percent reduction for the control device, instead of emission rate limits. Therefore, the Subpart B requirement to "correlate" the annual emission inventory information (in Mg/yr, discussed in Section 3.4) with the MSW landfill emission standards is not helpful for controlled MSW landfills. Thus, the more appropriate correlation is to the NMOC threshold in Mg/yr. The performance testing, monitoring, and recordkeeping procedures in the Emission Guidelines are appropriate for determining compliance with the percent reduction limit and collection system requirements.